

Claims

1. An arrangement for relayed services in a mobile radio frequency telecommuni-
cation system comprising:

5 a plurality of mobile communication terminals (1-5), from which an
established point-to-point connection either originates or terminates,
the mobile communication terminals (1-5) operating in a mobile packet
switched communication network, such as a third generation general packet ra-
dio service network,

10 a global and universal interconnecting network, such as the Internet,
at least one router (23, 24), which bi-directionally provides a connect-
ing bridge for transmission of data between the mobile packet switched commu-
nication network and the global and universal interconnection network,
characterised in that

15 at least one Internet relay mobile Voice over IP (IRMV) server (10-12)
is provided in the a global and universal interconnecting network, in order to en-
able communication between mobile communication terminals (1-5) so as to
avoid the need for operator interference with the established point-to-point
communication.

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2. An arrangement for relayed services according to claim 1, **characterised in that**
the servers (10-12) and routers (20-24) are adapted to allow voice in-
formation to be transmitted over the data distribution channels.

- 25 3. An arrangement for relayed services according to claim 1, **characterised in that**
the mobile communication terminals (1-5) are adapted to allow voice
information to be transmitted using the data communication mode of the mobile
communication terminals.

4. An arrangement for relayed services according to anyone of preceding claims,
characterised in that

voice traffic is encoded in accordance with any of the ITU H.323 protocols.

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5. An arrangement for relayed services according to anyone of preceding claims,
characterised in that

provided access points for mobile communication terminals (1-5) at least partly incorporate the IRMV server functionality.

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6. An arrangement for relayed services according to claim 5, **characterised in that**
the IRMV server functionality at access points is carried out by means of search engine and file sharing software.

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7. An arrangement for relayed services according to anyone of preceding claims,
characterised in that

the mobile communication terminals (1-5) are WLAN or Bluetooth enabled devices.

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8. A method in a mobile radio frequency telecommunication system for retrieval of dynamic IP-address information,
characterised by the steps of:

registering an IP-address of a first mobile communication terminal (1-5) in an operator's address record, the registration being acknowledged by the operator of the first mobile communication terminal (1-5),

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registering an IP-address of a second mobile communication terminal (1-5) in an operator's address record, the registration being acknowledged by the operator of the second mobile communication terminal (1-5),

the first mobile communication terminal (1-5) transmitting a request for the registered IP-address of the second mobile communication terminal (1-5), the

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request being relayed from one operator's address record to the other in case of different records, and

the first mobile communication terminal (1-5) retrieving the registered IP-address of the second mobile phone (1-5) from the operator's address record.

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9. A method in a mobile telecommunication system according to claim 8, further characterised by the step of:

retrieving the dynamic IP-address of at least a third communication terminal (1-5), which is to be connected to a call session between other mobile communication terminals (1-3).

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10. A method in a mobile radio frequency telecommunication system for establishing a connection for voice data distribution, characterised by the steps of:

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a first mobile communication terminal (1-5) transmitting a request for establishing a communication session with a registered IP-address of a second mobile phone (1-5),

the request being relayed from one operator's access server (10-12) to another access server (10-12) in case of different access servers,

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the second mobile communication terminal (1-5) transmitting an acknowledgement message to the first mobile communication terminal (1-5) including acceptance message and preparation for communication session message,

the request being relayed from one operator's access server (10-12) to another access server (10-12) in case of different access servers, and

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establishing a relayed communication session between the first and second mobile communication terminals via the access servers (10-12).

11. A method in a mobile telecommunication system according to claim 10, further characterised by the step of:

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continuing to establish a connection with at least a third communication terminal (1-5), which is connected to the previously connected mobile communication terminals (1-3).

- 5 12. A method in a mobile telecommunication system according to anyone of claims 8-11, further characterised by

in dependence of the transmission quality of a call, establishing a new routing path onto which an established call of unsatisfactory transmission quality can be exchanged.

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13. A method in a mobile telecommunication system according to anyone of claims 8-11, further characterised by

registering the IP-address, the IP-address being associated with certain identifiers, such as name, telephone number, or any other unique identity number, such as a fixed allocated IP-address.

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14. A method in a mobile telecommunication system according to anyone of claims 8-13, further characterised by

allocating IP-addresses by means of a Internet service provider (ISP), preferably mobile ISP, or other entity managing an access point.

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15. A method in a mobile telecommunication system according to anyone of claims 8-14, further characterised by

searching, by means of search engine and file sharing software, for a dynamic IP-address by means of thereto associated identifiers, such as name, telephone number, or any other unique identity number, such as a fixed allocated IP-address.

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16. A computer program product, at least partly integrated in the arrangement of anyone of claims 1-7, characterised in that

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the computer program product is adapted for carrying out the method
steps of anyone of claims 8-15.

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AMENDED SHEET